Claims:

1. A multicarrier communication system, comprising:

a transmitter having channel knowledge of a communication link to select a subcarrier to puncture prior to transmission.

2. The system of claim 1 wherein the transmitter is an Orthogonal Frequency Division Multiplexing (OFDM) transmitter.

3. The system of claim 1 wherein the channel knowledge is determined by the transmitter.

4. The system of claim 1 further comprising:

a receiver coupled to the transmitter where the receiver determines the channel knowledge.

5. The system of claim 1 wherein the channel knowledge is selected from multipath fading, in-band interference and active electronic devices.

6. The system of claim 1 wherein the subcarrier is punctured by placing energy in the subcarrier without including any modulated data or information.

7. The system of claim 1 wherein the subcarrier is punctured and a Peak-to-Average Power Ratio (PAPR) of an OFDM symbol is reduced.

8. The system of claim 1 wherein the subcarrier is punctured by placing no energy in the punctured subcarrier and a power level for remaining subcarriers is maintained.

9. The system of claim 1 wherein the subcarrier is punctured and

power is redistributed to remaining subcarriers.

10. The system of claim 1 wherein the subcarrier is punctured to avoid in-band spectral interference.

11. A communications device comprising:

a transmitter having channel knowledge of a communication link to select a carrier to puncture prior to transmission.

12. The communications device of claim 11 wherein the carrier is punctured by placing energy in the carrier without including any modulated data or information.

13. The communications device of claim 11 wherein the carrier is punctured and a Peak-to-Average Power Ratio (PAPR) of a symbol is reduced.

14. The communications device of claim 11 wherein the carrier is punctured by placing no energy in the punctured carrier and a power level for remaining carriers is maintained.

15. The communications device of claim 11 wherein the carrier is punctured and power is redistributed to remaining carriers.

16. The communications device of claim 11 wherein the carrier is punctured to avoid in-band spectral interference.

17. A system comprising:

an analog transceiver having at least one receiver chain to demodulate a subcarrier;

a processor coupled to the at least one receiver chain to select a subcarrier to puncture prior to transmission based on channel knowledge of a communication link; and

a Static Random Access Memory (SRAM) memory coupled to the processor.

18. The system of claim 17, wherein the processor further includes:

an Orthogonal Frequency Division Multiplexing (OFDM) transmitter having a carrier puncturing circuit with an input to receive channel knowledge information.

19. The system of claim 18 wherein the carrier puncturing circuit receives channel knowledge information about in-band spectral interference to puncture a subcarrier.

20. The system of claim 17 wherein the processor further includes:

an Orthogonal Frequency Division Multiplexing (OFDM) receiver having a carrier depuncturing circuit that receives information about subcarriers to skip.